## PROCEEDINGS

OF THE

# BIOLOGICAL SOCIETY OF WASHINGTON

#### DESCRIPTIONS OF THREE NEW ASIATIC SHREWS.\*

BY GERRIT S. MILLER, JR.

Among the Asiatic shrews in the United States National Museum are two species that appear to have not yet been named. A third was recently submitted to me for determination by Mr. Oldfield Thomas.

#### Crocidura ilensis sp. nov.

Type.—Adult female (skin and skull) collected in open grass country at Kukturuk, (altitude, 5400 ft.) Ili, central Asia, October 12, 1899, by P. Church. Original number, 4. Specimen to be presented to the British Museum.

Characters.—In general similar to Kashmir specimens of Crocidura myoides (Blanford), but smaller. Color distinctly paler than in the Kashmir animal, the feet nearly white. Skull with more slender rostrum and smaller teeth.

Color.—Dorsal surface pale drab, the hairs drab-gray subterminally and a gray about matching Ridgway's No. 6 (Pl. II) at base. Ventral surface silvery whitish gray in distinct but not sharply defined contrast with color of back. Feet whitish gray. Tail indistinctly bicolor, whitish gray below, drab above.

Skull and teeth.—The skull is distinctly smaller than that of C. myoides and C. russula, which are of essentially the same size. In form, how-

<sup>\*</sup>Published here by permission of the Secretary of the Smithsonian Institution.

ever, it is not peculiar. Teeth as in *C. myoides* but smaller throughout. The unicuspid teeth resemble those of the Kashmir animal in their smaller size and less terete form as compared with those of *C. russula*.

Measurements.—External measurements of type: total length, 85; head and body, 55; tail vertebræ, 30; hind foot, 13; hind foot without claws, 12.

Cranial measurements of type: greatest length, 16.6; greatest postorbital breadth, 8.4; greatest antorbital breadth, 6; least interorbital breadth, 4; mandible, 10; entire maxillary toothrow, 8.4; entire mandibular toothrow, 8.

Specimen examined.—One, the type.

Remarks.—Crocidura ilensis agrees with C. lignicolor in size, but is very different in color. In the latter character it is almost identical with C. sicula, though lacking the faint broccoli-brown wash on the dorsal surface. The skull is only a triffe smaller than that of C. sicula and the toothrow as a whole is of about the same length; but the unicuspid teeth are much smaller.

### Crocidura shantungensis sp. nov.

Type.—Adult (skin and skull) No. 86,151, United States National Museum. Collected at Chimeh, Shantung, northern China, June, 1898, by Paul D. Bergen.

Characters.—Size and general appearance as in Crocidura ilensis, but molar teeth both above and below distinctly smaller.

Color.—In color Crocidura shantungensis closely resembles C. ilensis, but the feet are less whitish and the dorsal surface is washed with broccoli-brown exactly as in C. sicula.

Skull and teeth.—The hinder part of the skull is broken away so that the form cannot be compared with that of the allied species. The rostrum differs from that of *C. ilensis* in greater relative breadth and depth. The teeth are throughout smaller than those of *C. ilensis*, but the difference is most noticeable in the molars. I can detect no tangible differences in form.

Measurements.—External measurements of type (from skin): total length, 87; head and body, 62; tail vertebræ, 25; hind foot, 13 (12).

Cranial measurements of type: entire maxillary toothrow, 7.8; greatest antorbital breadth, 5.4; mandible, 9; entire mandibular toothrow, 7. Specimen examined.—One, the type.

Remarks.—While this species exactly resembles C. sicula in color, it is readily distinguished by its shorter, more bristly tail. In this character it differs from all the known European members of the genus and agrees with the Asiatic C. myoides, C. ilensis, and C. lignicolor.

#### Sorex macropygmæus sp. nov.

Type.—Adult male (skin and skull) No. 84,012, United States National Museum. No. 8019, Leonhard Stejneger. Collected at Petropaulski, Kamchatka, September 23, 1897, by Mrs. Stejneger.

Characters.—In general appearance similar to Sorex minutus but size considerably greater (hind foot, 13, greatest length of skull, 17).

Color.—Upperparts sepia, slightly darker across lumbar region, and becoming paler on sides where a rather abrupt change takes place to the broccoli-brown of the underparts, Tail distinctly bicolor, dark sepia above and at tip, light shining broccoli-brown beneath. Feet like under surface of tail.

Skull and teeth.—The skull throughout is larger than that of Sorex minutus, forming in this respect an exact intermediate between that of the pigmy shrew and Sorex araneus. In form it is not peculiar.

Teeth as in *Sorex minutus* except that the third and fourth unicuspids are subequal when viewed from the side, that is the fourth is not distinctly smaller than the third as in the case in *S. minutus*.

Measurements.—External measurements of type\*: total length, 107; head and body, 70; tail vertebrae, 37; hind foot, 13 (12).

Cranial measurements of type: greatest length, 17.6 (15.4)†; greatest postorbital breadth, 8.4 (7.6); greatest antorbital breadth, 4.4 (4); least interorbital breadth, 3.4 (2.8); mandible, 8 (6.6); entire maxillary toothrow, 7.6 (6.8); entire mandibular toothrow, 7 (6).

Specimens examined.—Three (one in alcohol), all from the type locality.

<sup>\*</sup>From fresh specimen by collector.

<sup>†</sup>Measurements in parenthesis are those of an adult Sorex minutus from Upsala, Sweden.